Innovate: Journal of Online Education

Volume 3
Issue 2 *December 2006/January 2007*

Article 4

1-1-2007

Discovering Collaborative e-Learning Through an Online Writing Course

Sarah Guth

Discovering Collaborative e-Learning Through an Online Writing Course

Discovering Collaborative e-Learning Through an Online Writing Course

by Sarah Guth

At the University of Padua in Italy, PhD students at the Faculty of Engineering do not attend traditional lectures as they did when they were undergraduate students; instead, they focus most of their time on research activities. When these students obtain significant results from their research, they must complete their projects by publishing these results in English, which is "now indisputably the language of international scholarship and research" (Flowerdew 1999, 243). Although most of these students do not find it difficult to read in English, they do have a lot of difficulty writing and speaking in English; moreover, most students even find writing in Italian a challenge since the only paper they have written is their degree thesis.

To help PhD students overcome these difficulties, I decided to offer an optional, non-credit, fully online academic writing course called Writing for PhD Students in 2001 and again in 2004. The course was designed as a fully online course for several reasons: to overcome time-space constraints, to exploit the opportunities for writing and reading offered by the Web and by the conferencing software FirstClass, and, most importantly, to overcome the language teacher's lack of field-specific knowledge by using asynchronous peer review. Although the aim of the course was to improve students' ability to write a research article (RA) in correct, accurate English, the main advantage of the course for students was learning how to use the conferencing software for collaboration and reflective peer review. The aim of this paper is to describe the course and consider why such collaborative learning should be regarded as just as, if not more, important than the other linguistic aims for an academic writing course.

Theories of Effective Writing Instruction

In order to "focus on the writing process and provide collaborative writing situations for authentic social purposes and audiences" (Mehlenbacher et al. 2001, 168), the language teacher employed a social constructivist approach towards learning; rather than providing interactive online activities to be completed individually, the course focused on peer collaboration, discussion, and feedback. Reaching the level of potential development (Vygotsky 1978) in an academic writing course depends on students' ability to tap into the knowledge they have acquired as researchers and readers and their ability to share these experiences. In this course, the teacher provided linguistic knowledge to help students with error correction, but the students had to learn to count on each other for content correction in their specific fields of research.

The pedagogical value of peer review in writing instruction has received significant attention by scholars, and its value is particularly significant in the context of a PhD program. Rollinson (2005, 24) suggests that peer readers can provide useful feedback that tends to be different from and more specific than teacher feedback, that peer writers can and do revise effectively on the basis of comments from peer readers, and that becoming a critical reader of others' writing may make students more critical readers and editors of their own writing. Furthermore, in an ESL course, written peer feedback and group work can develop students' communication skills in English by providing interactive opportunities for collective scaffolding and meaning negotiation (Hansen and Liu 2005, 32). Finally, insofar as "peer review is the quality control system of science" (Kern et al. 2002, ¶1) and insofar as learning how to evaluate a research paper is part of the process of learning how to write one (Smith 1990), PhD students benefit from learning peer review skills that will be important both during and following their graduate studies. Refereeing, which is a form of peer review, is one of the professional obligations of scientists, yet it is a skill that PhD students in Italy are never formally taught. Because professional reviewing and critiquing are part of best practices in the scientific community, the course was designed specifically to help students integrate these skills with the process of writing an RA in English.

Online Writing Instruction

One might argue that given the "no significant difference" phenomenon between classroom versus distance learning (Russell 2006), there is no significant reason why an effort should be made to teach academic writing, or any other course for that matter, online. However, as a practical benefit, an online course overcomes time and space constraints. There are pedagogical benefits to the online format as well, particularly in the case of writing instruction (Table 1). Online students can work at their own pace, leading to more careful reading and reflecting on the writing and peer review processes. In an online course, the knowledge, competencies, and skills that make up each student's tacit knowledge are brought together in the peer review process, and the new knowledge created is then readily retrievable in a digital format (Trentin 2004). Finally, conferencing software allows students to share, review, and comment on documents in ways that are not possible in a traditional classroom; this is particularly true in the case of FirstClass, the software adopted in the PhD writing course described in this article (Exhibit 1).

The shift from traditional classroom instruction to an online synchronous environment, however, entails significant changes in the teacher-student relationship as well as the relationship between the students themselves. Traditional classroom instruction involves a one-to-many relationship between teacher and student rather than a one-to-one relationship, and in such a learning environment, the role of collaboration among students tends to be limited in scope. Although teachers in the classroom can work directly with individual students or have students work in groups, such forms of interaction within the classroom can only take place at designated times during which one-to-many communication inevitably takes place; otherwise, such forms of interaction require special sessions outside the classroom setting. In contrast, an online learning environment results in a twofold change in communication for all the parties involved. On the one hand, such an environment affords greater opportunities for the teacher to provide guidance, assistance, and feedback to individual students. On the other hand, as noted by Garrison (2006), such an environment also "reflects a 'group-centered' interaction pattern versus an 'authority-centered pattern' of a face-to-face environment. Moreover, there is a tendency to build on the comments of others in the online environment (higher flow of communication), compared to the 'turn-taking' face-to-face environment" ("Introduction," ¶ 2). Such changes consequently bring with them the challenge of finding an effective balance between these two forms of communication. Since "reading and replying one-to-one with text is much more labor intensive than the oral exchanges in a face-to-face class" (Smith and Taveras 2005, 1), an online instructor must find ways to alleviate the pressure to respond to every student message by encouraging students to become more autonomous and to rely on one another by working in groups. As will be indicated in the descriptions below, the Writing for PhD Students course was designed to meet this challenge while fulfilling its overall goals as a writing course.

Course Setup

At the University of Padua, undergraduate students are required to take a General English test (level B1 of the Common European Framework of Reference for Languages), and courses in General English are offered to a limited number of students. The only written work they must produce is their final thesis; all other exams are oral. In turn, students are offered no language courses during their graduate studies, and they are only required to write if they publish. The learning paradigm in the Faculty of Engineering is predominantly based on information transference, and the main goal of students is to pass exams. Prior to their PhD research students in the Faculty of Engineering do little to no project work and only collaborate in an informal way when studying for their oral exams. Due to these factors, it was necessary for the Writing for PhD Students course to focus not only on writing in English but also on writing a research paper (in any language) as a process for which peer review is an important aspect. The course consequently had three main learning objectives: (1) improved efficiency in writing a research article in English, (2) improved accuracy in writing in English, and (3) improved ability to read other people's written work as well as one's own critically.

In keeping with these objectives, the course was divided into two paths: the writing path (objectives 1 and 3) and the language path (objective 2). The writing path was organized around 10 modules that encompassed

key stages of the writing process; early modules addressed issues of audience and the selection of a title whereas subsequent modules addressed issues relating to the outline, the abstract, and the introduction, leading eventually to the drafting of primary text and the completion of a final draft in the later modules. In turn, these 10 modules of the writing path were accompanied by tasks in the language path designed to increase students' awareness of possible linguistic pitfalls and improve written accuracy in English (Table 2). In order to increase motivation, the language teacher required students to write about their own research, giving them the possibility of having an almost ready-to-publish article by the end of the course.

In order to encourage student autonomy and peer review, the instructor placed students in two peer groups during the overall progression of the course. At the beginning of the course, the instructor placed students in mixed peer groups consisting of three peers from different fields of engineering; conferences for these mixed peer groups were designated as Group Revision Conferences (GRCs) on the course Web page. Students in the GRCs completed all language path tasks, whereas in the writing path they only worked together to complete the first three modules—which consisted of getting to know one another, becoming familiar with the FirstClass software, considering audience, and writing titles and outlines for their research papers. Subsequently, the instructor placed students in groups consisting of three peers from the same field of engineering; conference sessions for these field-specific peer groups were designated as Peer Revision Conferences (PRCs) on the course Web page. Students in the PRCs worked together to complete Modules 4-10 of the writing path—which consisted of the drafting and peer review of various parts of the RA including the abstract, the introduction, the middle sections, and the discussion/conclusion sections. For the latter modules, field-specific peer groups were necessary in order to ensure that peers could understand the content of the articles and provide appropriate feedback. Through the course Web page, these different peer groups were able to access modules from the writing path, learning activities from the language path, and conference posts in which peer members consulted and collaborated with one another about their work (Exhibit 2).

In order to foster online collaborative learning, the instructor used Gilly Salmon's five-stage framework as a reference (Salmon 2000, 2002; Holmlund n.d.). In this framework, the beginning of an online course focuses on socialization rather than working on the content of the course; thereafter, the course focus gradually shifts from socialization, to course-related cooperative goals and collaboration, and finally to personal goals and reflection. Although the model was followed loosely, this overall shift in focus characterized the sequence of the modules and associated activities in the course. For example, substantial content writing did not begin until Module 4, which gave students sufficient time to get used to using the technology for peer revision and to get to know one another through describing themselves (Module 1) and their research (Modules 2 and 3). With the introduction of Module 4, real information exchange took place as students had to begin commenting on the quality and content of one another's abstracts. In Modules 4 and 5, students were provided with checklists (Exhibit 3, Exhibit 4) to guide them through the peer revision process (Exhibit 5) whereas in Modules 7 and 9, students had the freedom to offer their own comments on the document(s) they were reviewing based on their knowledge of the subject matter (Exhibit 6). Finally, Modules 6, 8, and 10 were dedicated completely to writing, which gave students the time to reflect further on knowledge that had been shared up to that point and apply it to the drafting of the longer parts of their RAs.

The workflow pattern in the course also allowed for an appropriate and effective balance between collaborative problem-solving among students and direct guidance from the instructor. In the language path (Table 3), students completed tasks individually, sent their completed tasks to their assigned Group Revision Conferences (GRCs), and negotiated a final product to turn in as a group (Exhibit 7). If during the negotiation process students could not come to agreement or felt they needed further feedback, they could send a question to the course mailbox; rather than intervening in the GRCs, the instructor could then respond to the entire class (Exhibit 8) or provide qualitative feedback to each group (Exhibit 9) as needed. This process encouraged learner autonomy and responsibility by forcing students to work together without relying on the instructor's constant assistance (cf. Whigham 2002). For example, students learned how to cross-check their language doubts using the Internet as a resource (Exhibit 10).

The same workflow could not be applied for the tasks in the writing path since the teacher's role here was error correction; the teacher had to read the work produced by each individual at each step of the writing process. However, in the writing path, students peer reviewed all of their written work before submitting it (Table 4), which still ensured that they relied upon one another before receiving individual guidance from the teacher. Moreover, this process allowed students to receive feedback on multiple drafts, which is more beneficial than comments from both peers and an instructor on a single draft (Hansen and Liu 2005). Most importantly, placing responsibility on the students in the writing path allowed members of the field-specific peer groups to provide feedback to one another that the instructor often could not provide; the workflow pattern thus relieved the language teacher of the laborious and often impossible task of correcting the field-specific content of the RAs while simultaneously providing students with much more specific, thoughtful, and substantial feedback than they would normally receive in an ESL writing course.

As reflected in the exhibits, all communication in the course was exclusively in English. Although students had to focus on clarity, accuracy, and usage when revising their written work, they were not required to do so when communicating with one another during the negotiation process. This degree of flexibility allowed students to be more comfortable and confident in their informal exchanges with one another while still providing opportunities for them to refine their English skills through implicit forms of learning. Even weaker students were willing to write in English from the start of the course, and they learned from their stronger peers both when communicating and when doing the group completion tasks.

Reflections

Clearly one cannot expect students to become perfect writers of scientific English in a 10-module course on academic writing; however, the course did attempt to provide students with the skills and tools to make the process of writing RAs in English more focused, efficient, and effective. Although the instructor conducted no formal assessment of this optional, non-credit course, informal feedback from students indicated that such skills and tools helped students with academic writing. In a questionnaire given to students six months after the course (Exhibit 11, Exhibit 12), for example, one student commented: "My evaluation of the course is positive given that it provided me with a valid work method for writing articles and reports in English."

Possibly the most valuable aspect of the course was that students learned how to work together and depend on peers for help when drafting scientific articles. Although most students will still require the assistance of a native English speaker before publishing their work in a peer-reviewed journal, the instructor's monitoring of individual student work, group vitality, and the peer revision process indicated that students learned to have their peers check their work for communicative efficacy and that they developed the ability to evaluate a text critically by using defensible criteria (Fenwick and Parsons 1999). As another student wrote in response to the questionnaire, "Attending this course helped me reduce the time it takes me to write an article and improve the quality of my scientific publications and the other documents I must write as a part of my research activity. I now have time to have my colleagues check my work and to check their work." In informal meetings between the instructor and students after the course's completion, students commented on the reduced time it takes them to write in English, and those students who asked the instructor to correct their subsequent work had already had it corrected by their peers first. Nonetheless, the lack of assessment—both of individuals as well as groups—remains a key weakness of the course; formal continuous (online) and final (online and face-to-face) assessment has been planned for future variants of the course.

Two additional challenges will also need to be addressed in the future: how to help all groups be equally successful and productive and how to integrate oral communication in course activities (Table 5). Some of the peer revision groups worked very well from the start, some groups needed a bit of help but then took off, and others never took off. The inconsistent participation, or total absence, of some members in some groups was often the cause of difficulties. Another cause of difficulty was the lack of sufficient teacher intervention due to a very high student-teacher ratio (50:1). In order to alleviate this problem, the course has been redesigned so that future versions of the course will include one instructor as language expert and one e-tutor for every 20 students with a maximum enrollment of 40 students per course. The language instructor will

create the content tasks, respond to language questions, and correct second drafts while the tutor(s) will focus more on managing the groups (i.e., fostering socialization, monitoring group success, motivating students, contacting students on an individual basis if necessary, and other tasks).

An oral communication element could also strengthen this kind of course significantly. While most Italian PhD students have to attend international conferences, they usually feel that their English is inadequate, and in most cases it is. Technology now makes it possible to exchange audio asynchronously and even synchronously online; however, this kind of exchange is still not the same as developing oral skills in person where nonverbal, multimodal behavior can be considered. Furthermore, given the limited access to broadband Internet in Italy, carrying out any sort of significant audio exchange online continues to be a major challenge. One solution to this problem is to integrate online writing courses for PhD students with face-to-face speaking courses; such integration could significantly improve students' communication skills in both written and spoken English.

Conclusion

Though the focus of this paper has been on teaching writing online, the work flow cycles used in this course could easily be applied to courses in any field. A task-based course that involves problem-solving activities, for example, could use the language path cycle proposed here to facilitate peer collaboration and alleviate a teacher's need to respond to all student communications. In a similar way, a course in which students could benefit from peer intervention when drafting their work (essays, presentations, etc.) could use the writing path cycle proposed here in order to take advantage of students' content expertise during the peer review process. The benefits of this work method result from the fact that students learn from each other and become more autonomous learners; these are skills that will serve them in both their personal and their professional lifelong learning processes.

[Editor's note: This article was modified from a presentation at the annual Online Educa Berlin conference in Berlin, Germany, December 2005.]

References

Fenwick, T., and J. Parsons. 1999. Incorporating peer assessment in adult education. http://www.ualberta.ca/%7Etfenwick/ext/pubs/peereval.htm (accessed November 24, 2006).

Flowerdew, J. 1999. Problems in writing for scholarly publication in English: The case of Hong Kong. *Journal of Second Language Writing* 8 (3): 243-264.

Hansen, J. G., and J. Liu. 2005. Guiding principles for effective peer response. *ELT Journal* 59 (1): 31-38.

Holmlund, R. n.d. Salmon's model of online learning. *Encyclopedia of Educational Technology*. http://coe.sdsu.edu/eet/Articles/salmonmodel/index.htm (accessed November 24, 2006).

Kern, V. M., J. Munarski Pernigotti, M. Montarroyos Calegaro, and M. Bento. 2002. Peer review in engineering education: Speeding up learning, looking for a paradigm shift. Paper presented at the Seventh International Conference on Engineering and Technology Education—INTERTECH, Santos, Brazil, March.

Mehlenbacher, B., C. R. Miller, D. Covington, and J. S. Larsen. 2000. Active and interactive learning online: A comparison of Web-based and conventional writing classes. *IEEE Transactions on Professional Communication* 43(2): 166-184. http://www4.ncsu.edu/~crm/Publications/MehlenbacherIEEETPC00.pdf (accessed November 24, 2006).

Rollinson, P. 2005. Using peer feedback in the ESL writing class. *ELT Journal* 59 (1): 23-30.

Russell, T. L. 2006. *The no significant difference phenomenon*. 5th ed. Montgomery, AL: International Distance Education Certification Center.

Salmon, G. 2000. *E-moderating: The key to teaching and learning online.* London: Kogan Page Limited.

Salmon G. 2002. *e-tivities: The key to active online learning*. London: Kogan Page Limited.

Smith, G. and M. Taveras. 2005. The missing instructor. *eLearn Magazine*, January 24. http://elearnmag.org/subpage.cfm?section=tutorials&article=18-1 (accessed November 24, 2006).

Trentin, G. 2004. *Apprendimento in rete e condivisione delle conoscenze. Ruolo, dinamiche e tecnologie delle comunità professionali online*. Franco Angeli: Brossura.

Whigham, C. 2002. The benefits of computer conferencing software in peer revision. In *2001—Anno europeo delle lingue: Proposte della nuova università italiana*, ed. C. Torsello, M. Catricalà, and J. Morley, 139-150. Siena: Terre di Sienne.

Vygotsky, L. 1978. *Mind in society*. London: Harvard University Press.

COPYRIGHT AND CITATION INFORMATION FOR THIS ARTICLE